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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,657	04/13/2004	Bjorn Stickling	2993-485US CMB/clb	3001
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			ART UNIT 3661	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE		DELIVERY MODE
3 MONTHS		12/20/2006		PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/822,657

Applicant(s)

STICKLING, BJORN

Examiner

Dalena Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 12, 13 and 15-35 is/are rejected.
- 7) ☒ Claim(s) 6-11 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/13/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-35 are pending.

The prior art submitted on 4/13/04 have been considered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 12-13, 15-17, 30-32, and 35, are rejected under 35 U.S.C.103(a) as being unpatentable over Royalty (7127683) in view of Kline (7050755).

As per claim 1, Royalty discloses an apparatus for connecting aircraft-certified equipment and to other equipment of uncertain certification level, apparatus comprising: a communication link between the aircraft-certified equipment and the other equipment (see columns 4-5, lines 41-2); an isolator in the communication link adapted to electrically isolate the aircraft-certified equipment from the other equipment (see columns 6-7, lines 8-3; and columns 7-8, lines 28-45). Royalty do not disclose selectively interrupt communication between the aircraft-certified equipment and the other equipment. However, Kline discloses a controller adapted to selectively interrupt communication between the aircraft-certified equipment and the other equipment (see the abstract; and column 4, lines 8-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Royalty by combining selectively interrupt communication between the aircraft-certified equipment

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and the other equipment to block signal interference between aircraft-certified equipment and the other equipment to provide safety for the aircraft.

As per claims 2-3, Kline also discloses the controller selectively interrupts communication by at least one of modifying a power level of electrical power supplied to the other equipment, interrupting at least a portion of the data communication link, blocking at least a portion of a data flow between the aircraft-certified equipment and the other equipment, and providing a command to the other equipment, and the controller is adapted to selectively re-permit communication after communication has been interrupted (see columns 4-5, lines 50-24).

As per claim 4, Royalty do not disclose the controller selectively interrupts communication from the other equipment to the aircraft-certified equipment but substantially permits continued communication from the aircraft-certified equipment to the other equipment. However, Kline discloses the controller selectively interrupts communication from the other equipment to the aircraft-certified equipment but substantially permits continued communication from the aircraft-certified equipment to the other equipment (see columns 2-3, lines 27-14; and column 4, lines 8-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Royalty by combining the controller selectively interrupts communication from the other equipment to the aircraft-certified equipment but substantially permits continued communication from the aircraft-certified equipment to the other equipment to limit interference with non- certified equipment.

Also, as per claim 5, Kline discloses the apparatus is adapted to provide electrical power to the other equipment from an aircraft-based source of electrical power

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to which the apparatus is connected, and where the controller is adapted to selectively interrupt said electrical power (see column 3, lines 15-56; and column 5, lines 25-67).

As per claim 12, Royalty discloses the aircraft-certified equipment is flight-critical (see columns 2-3, lines 32-3).

As per claim 13, Royalty discloses the aircraft-certified equipment includes at least one of an aircraft engine control system and an aircraft flight control system (see columns 4-5, lines 41-2).

As per claim 15, Royalty discloses the other equipment is adapted for communication with the Internet (see columns 5-6, lines 3-7).

As per claim 16, Royalty does not disclose interruption is temporary. However, Kline discloses interruption is temporary, and wherein duration of interruption is determined by the controller (see columns 4-5, lines 50-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Royalty by combining interruption is temporary to establish communication with the other electronic equipment in the aircraft.

As per claim 17, Royalty discloses intrinsic protocol conversion between aircraft protocols and consumer electronic protocols (see columns 7-8, lines 28-45).

Claims 30-32, and 35, are method claims corresponding to apparatus claims 1-2 above. Therefore, they are rejected for the same rationales set forth as above.

4. Claim 18, is rejected under 35 U.S.C.103(a) as being unpatentable over Royalty (7127683) in view of McElreath (6401013).

As per claim 18, Royalty discloses an apparatus for connecting aircraft data systems to non-aircraft data systems, the apparatus comprising: a communication

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apparatus permitting data communication therethrough between at least one aircraft data system and at least one non-aircraft data system (see columns 4-5, lines 41-2). Royalty does not disclose initiate at least one control operation on the non-aircraft data system. However, McElreath discloses a control apparatus adapted to receive information from an aircraft-based source, the information indicative of at least one control parameter, wherein the control apparatus is adapted to initiate at least one control operation on the non-aircraft data system based on the received at least one control parameter (see columns 1-2, lines 48-8; and columns 3-4, lines 57-32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Royalty by combining initiate at least one control operation on the non-aircraft data system to monitor communication between non-aircraft data system and the aircraft data system.

5. Claims 19-25, and 27-29, are rejected under 35 U.S.C.103(a) as being unpatentable over Royalty (7127683), and McElreath (6401013) as applied to claim 18 above, and further in view of Kline (7050755).

As per claims 19-20, Royalty, and McElreath do not disclose partially interrupting data communication. However, Kline discloses the at least one control operation is selected from the group of at least partially interrupting data communication, modifying data communication, interrupting electrical power supplied to the non-aircraft data system and modifying electrical power supplied to the non-aircraft data system, wherein at least partially interrupting data communication includes permitting continued communication from the aircraft data system to the non-aircraft data system (see column 4, lines 8-49). It would have been obvious to one of ordinary skill in the art at the time

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the invention was made to modify the teach of Royalty by combining partially interrupting data communication to selectively block the communication between the aircraft data system and the non-aircraft data system during take-off, approaches, and landings to eliminate interference signals.

As per claim 21, Royalty discloses the at least one aircraft data system is flight-critical (see the abstract).

As per claim 22, Royalty discloses the at least one aircraft data system is selected from the group comprising an aircraft engine controller and an aircraft avionics system (see columns 7-8, lines 28-46).

As per claims 23-25, and 27, Royalty discloses the at least one control operation is non specific to the non-aircraft data system, the at least one non-aircraft data system primarily adapted for ground-based use, and wherein the device is substantially a commercially-available consumer data system, and the at least one non-aircraft data system uncertified for aircraft in-flight use (see columns 5-6, lines 3-7).

As per claims 28-29, Royalty discloses intrinsic protocol conversion between aircraft protocols and consumer electronic protocols, and an isolation apparatus for electrically isolating the aircraft data system and non-aircraft data system (see columns 7-8, lines 28-46).

6. Claims 26, and 33-34, are rejected under 35 U.S.C.103(a) as being unpatentable over Royalty (7127683), and McElreath (6401013) as applied to claim 18 above, and further in view of Jones (5670742).

As per claim 26, Royalty does not disclose the at least one non-aircraft data system is substantially electromagnetically unshielded relative to the aircraft data system.

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However, Jones discloses the at least one non-aircraft data system is substantially electromagnetically unshielded relative to the aircraft data system (see the abstract; and columns 2-3, lines 49-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Royalty by combining the at least one non-aircraft data system is substantially electromagnetically unshielded relative to the aircraft data system to detect electromagnetic interference to the aircraft system.

As per claims 33-34, Jones discloses the signal is acquired from an aircraft engine and is indicative of an engine operational status, and an aircraft operational status (see columns 4-5, lines 15-9; and columns 5-6, lines 42-4).

7. Claims 6-11, and 14, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Dutcher (4833476)

. Gofman et al. (6456822)

. Kroll (6580915)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968.

The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner
Dalena Tran

A handwritten signature in black ink, appearing to read 'Dalena Tran', followed by a horizontal line.

December 12, 2006